

CLAIMS

We Claim:

1. An endoscopic morcellator device comprising:
an elongate shaft having a proximal end and a distal end and a lumen
extending therethrough;
a handle coupled to the proximal end of the shaft;
at least one active electrode disposed about a periphery of the distal
end of the shaft;
at least one return electrode disposed at the distal end of the shaft
and electrically insulated from the at least one active electrode; and
at least one fluid conduit extending along the shaft and having an
outlet at the distal end of the shaft.
2. The device according to claim 1, wherein the at least one return
electrode is disposed about the periphery of the distal end of the shaft at a
location proximal of the at least one active electrode.
3. The device according to claim 1, further comprising a plurality of fluid
conduits extending along the shaft and each having an opening at the distal
end of the shaft, wherein the openings of the plurality of fluid conduits are
disposed about the periphery of the distal end of the shaft.
4. The device according to claim 1, wherein the periphery of the distal
end of the shaft is substantially circular.

5. The device according to claim 1, further comprising an RF energy source electrically coupled to the at least one active electrode.

5 6. The device according to claim 5, wherein the RF energy source provides sufficient energy to create vapor pockets on a surface of the at least one active electrode.

7. The device according to claim 6, further comprising a foot pedal for controlling energy delivered by the RF energy source.

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8. The device according to claim 1, further comprising a fluid source in fluid communication with the at least one fluid conduit for providing fluid thereto.

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9. The device according to claim 1, wherein the at least one active electrode is disposed distal of the at least one return electrode.

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10. The device according to claim 1, further comprising a plurality of active electrodes substantially equally spaced apart about the periphery of the distal end of the shaft.

11. The device according to claim 1, wherein a plurality of return electrodes are positioned between successive ones of the plurality of active electrodes.

12. The device according to claim 1, wherein the at least one active electrode is electrically insulated from the at least one return electrode by an insulator disposed therebetween.

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13. A method for endoscopically morcellating a patient's tissue comprising the steps of:

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a) providing an endoscopic morcellator having an elongate shaft having a proximal end and a distal end and a lumen extending therethrough, a handle coupled to the proximal end of the shaft, at least one active electrode disposed about a periphery of the distal end of the shaft, at least one return electrode disposed at the distal end of the shaft and electrically insulated from the at least one active electrode, and at least one fluid conduit extending along the shaft and having an outlet at the distal end of the shaft;

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b) advancing a tissue engaging device through the shaft;

c) engaging at least a portion of a target tissue with the tissue engaging device;

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d) withdrawing the tissue engaging device and engaged tissue into the shaft lumen so as to cause the tissue to contact the at least one active electrode;

e) supplying electrosurgical energy to the at least one active electrode thereby cut the tissue; and

f) removing the tissue from the patient through the shaft lumen.

14. The method according to claim 12, further comprising a plurality of active electrodes substantially equally spaced apart about the periphery of the distal end of the shaft.

5 15. The method according to claim 12, further comprising a plurality of fluid conduits extending along the shaft and each having an opening at the distal end of the shaft, wherein the openings of the plurality of fluid conduits are disposed about a periphery of the distal end of the shaft.

10 16. The method according to claim 12, wherein the at least one return electrode is disposed about the periphery of the distal end of the shaft at a location proximal of the at least one active electrode.

15 17. The method according to claim 12, wherein the periphery of the distal end of the shaft is substantially circular.

20 18. The method according to claim 12, wherein the endoscopic morcellator further comprises an RF energy source electrically coupled to the at least one active electrode, and wherein the RF energy source provides sufficient energy to create a vapor pockets on a surface of the at least one active electrode.

19. The method according to claim 12, wherein the endoscopic morcellator further includes a plurality of active electrodes and a plurality of

return electrodes, wherein the return electrodes are positioned between successive ones of the plurality of active electrodes.

20. A morcellator comprising:

- 5 a) an elongate shaft having a proximal end, a distal end and a lumen extending therethrough;
- b) at least one active electrode disposed about a periphery of the distal end the shaft;
- c) at least one return electrode at the distal end of the shaft and
10 electrically insulated from the at least one active electrode;
- d) at least one fluid delivery conduit extending along the shaft, and having an opening at one end positioned in proximity to the at least one active electrode for delivering fluid in proximity thereto;
- e) a handle fixedly coupled to the proximal end of the shaft;
- 15 f) a fluid delivery means in fluid communication with the at least one fluid delivery conduit for delivering fluid therethrough; and
- g) an RF energy source electrically coupled to the at least one active electrode.